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Frank C. Eisenschenk

Frank C. Eisenschenk, Ph.D., Patent Attorney

REQUEST FOR CERTIFICATE OF
CORRECTION UNDER 37 CFR 1.322

Docket No. INN-134T

Patent No. 7,101,711

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Christian Belmant, Jean-Jacques Fournie, Marc Bonneville, Marie-Alix Peyrat
Issued : September 5, 2006
Patent No. : 7,101,711
For : Phosphoepoxides, Method for Making Same and Uses

Mail Stop Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate
JAN 09 2007
of Correction

REQUEST FOR CERTIFICATE OF CORRECTION
UNDER 37 C.F.R. § 1.322 (OFFICE MISTAKE)

Sir:

A Certificate of Correction (in duplicate) for the above-identified patent has been prepared and is attached hereto.

In the left-hand column below is the column and line number where errors occurred in the patent. In the right-hand column is the page and line number in the application where the correct information appears.

Patent Reads:

Title page, Item (73), line 1:

“de la Santa”

Application Reads:

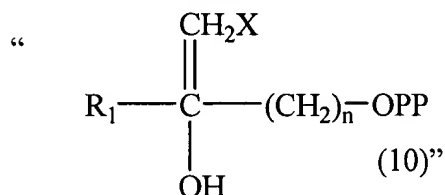
Issue Fee Form, Assignee Name:

--de la Sante--

JAN 11 2007

Column 3, line 59:

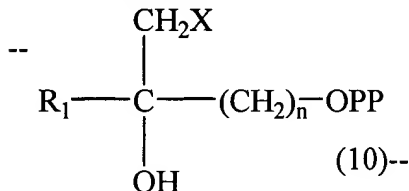
“19,20-epoxy-1 g-methyl-1-eicosyl”

Column 7, line 33:Column 24, line 36:

“culture x-axis in Fig. 1).”

Page 5, line 5:

--19,20-epoxy-19-methyl-1-eicosyl--

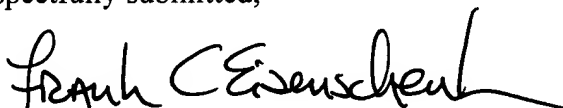
Page 9, line 33:Page 32, line 20:

--culture (x-axis in Fig. 1).--.

A true and correct copy of pages 5, 9, and 32 of the specification as filed and a true and correct copy of the Issue Fee Transmittal form showing the name of the assignee which support Applicants' assertion of the errors on the part of the Patent Office accompanies this Certificate of Correction.

Approval of the Certificate of Correction is respectfully requested.

Respectfully submitted,



Frank C. Eisenschenk, Ph.D.

Patent Attorney

Registration No. 45,332

Phone No.: 352-375-8100

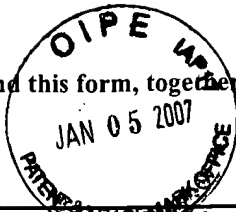
Fax No.: 352-372-5800

Address: P.O. Box 142950

Gainesville, FL 32614-2950

FCE/gyl/sl

Attachments: Copy of pages 5, 9, and 32 of the specification
Copy of Issue Fee Transmittal form



PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUANCE FEE**
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Alexandria, Virginia 22313-1450
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

23557 7590 04/25/2006
SALIWANCHIK, LLOYD & SALIWANCHIK
A PROFESSIONAL ASSOCIATION
P.O. BOX 142950
GAINESVILLE, FL 32614-2950
Ph: (352)375-8100
Fax: (352)372-5800

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Sherry Loke	(Depositor's name)
<i>Sherry Loke</i>	(Signature)
July 18, 2006	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,055	03/01/2001	Christian Belmant	-BE-8992-	6944

TITLE OF INVENTION: PHOSPHOPOXIDES, METHOD FOR MAKING SAME AND USES INN-134T

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$0	\$1400	07/25/2006

EXAMINER	ART UNIT	CLASS-SUBCLASS
SCHNIZER, RICHARD A	1635	435-384000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

Saliwanchik, Lloyd & Saliwanchik

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

INSTITUT NATIONAL DE LA SANTE
ET DE LA RECHERCHE MEDICALE

PARIS, FRANCE

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☒ Government

4a. The following fee(s) are enclosed:

- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☒ Advance Order - # of Copies 2

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☒ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 19-0065 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature *Frank C. Eisenschenk*
Typed or printed name Frank C. Eisenschenk, Ph.D.

Date July 18, 2006
Registration No. 45,332

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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The invention also in particular relates to the novel
10 phosphoepoxides of the following formula:



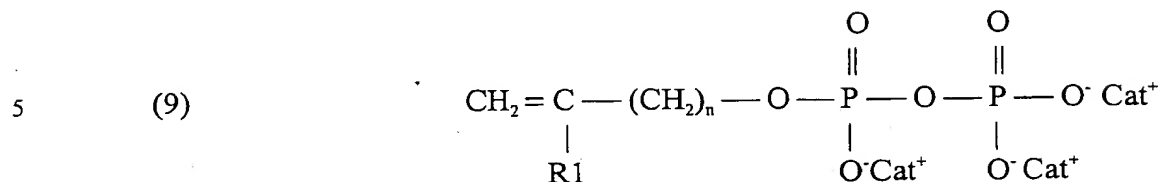
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The invention accordingly also provides novel compounds comprising at least one phosphoepoxide group of the formula:

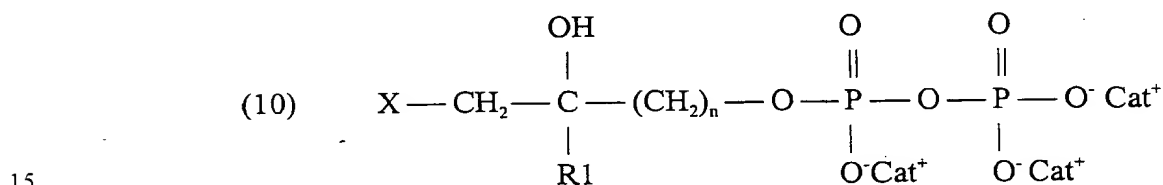


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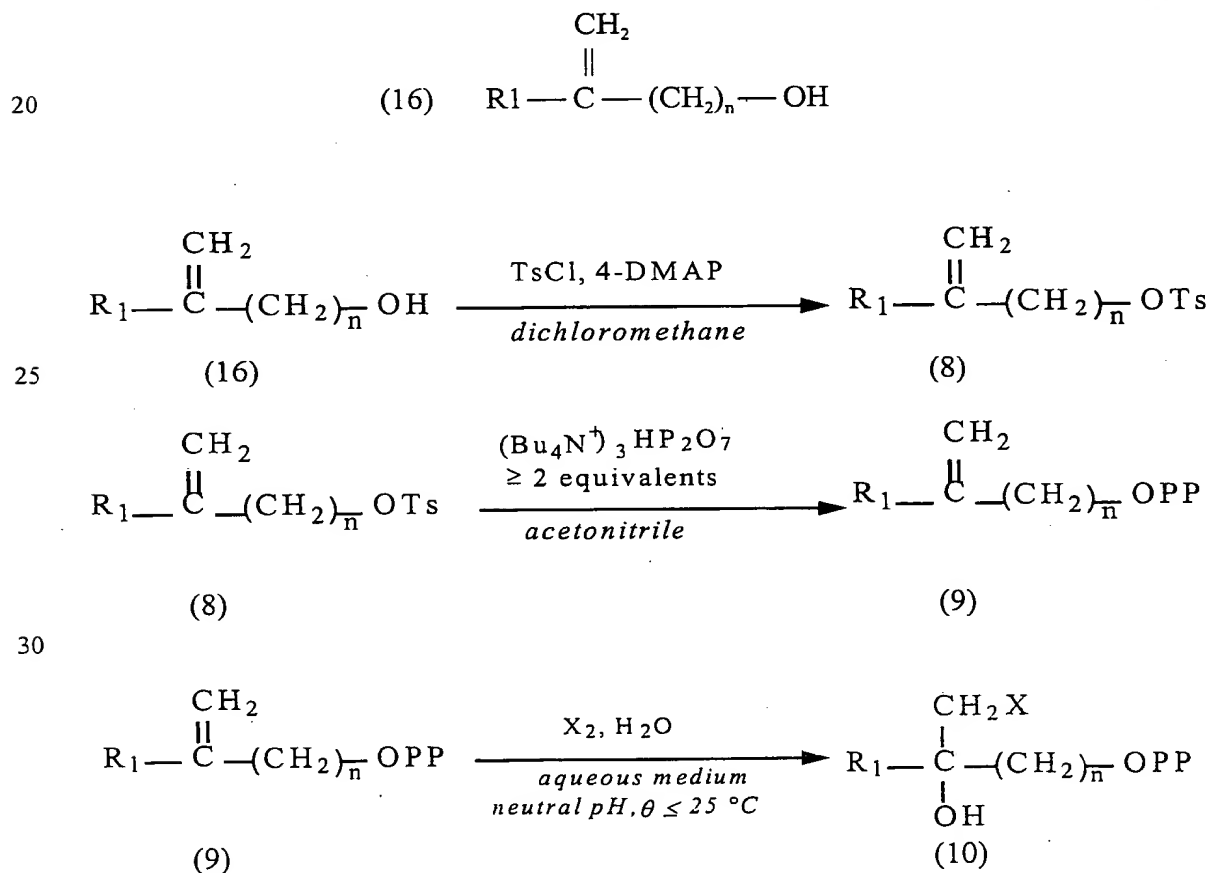
Advantageously and according to the invention, the starting compound is a salt of the formula:



The intermediate phosphohalohydrin compound of the following formula is then obtained:



An example of a complete reaction scheme for obtaining the intermediate compound (10) from the alcohol (16) is given below:



where TsCl is tosyl chloride,
4-DMAP is 4-dimethylaminopyridine,

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butyl) is obtained, which is treated as in Example 1 for the performance of biological testing and/or for the performance of *in vivo* testing and stored at - 20°C.

EXAMPLE 5: Measurement of antigenic activity by stimulation of the proliferation of Ty982 lymphocytes in a culture:

5 20 microliters of the aqueous solution of the compound according to the invention to be tested which has been adjusted to the final concentration specified in the test are added to an *in vitro* culture of 10^6 total T lymphocytes in 1 ml, separated from the blood of a healthy adult human donor and initially containing 1-5% of Ty982 lymphocytes, in an adequate culture medium (RPMI 1640+10% of inactivated human
10 serum and 50 U/ml of human interleukin-2 (hIL-2)). After culturing for 4 days, 50 U of hIL-2 are added per milliliter of culture medium. After 8 days, the cells are counted, collected, washed with phosphate buffer, and the Ty982 type cells are detected in the culture by labeling with conventional commercial reagents (fluorescein-labeled monoclonal antibodies) and the proportion thereof determined by flux cytometry
15 analysis. The parameter measured is either the change in the proportion of or the increase in the number of Ty982 cells in cultures in the presence of the compound according to the invention in comparison with cultures not containing a compound according to the invention. The results of this testing are represented by plotting curves of these values (y-axis in Figure 1) as a function of concentration on a logarithmic scale of the compound
20 according to the invention placed in the culture (x-axis in Figure 1).

Figure 1 shows the results obtained with the compounds according to the invention obtained in Example 1 (EpoX-PP), with the dotted line being a negative control (value obtained in the absence of the compound according to the invention).

25 Table 1 below shows the ED50 values, the effective dose at 50% of the maximum polyclonal lymphocyte amplification effect obtained as stated above with IPP (by way of comparison) and with various compounds according to the invention.

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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 7,101,711

Page 1 of 1

APPLICATION NO.: 09/786,055

DATED : September 5, 2006

INVENTORS : Christian Belmant, Jean-Jacques Fournie, Marc Bonneville, Marie-Alix Peyrat

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title page,

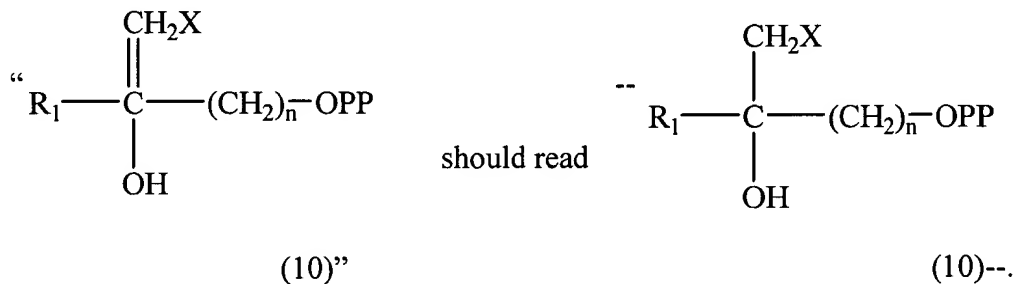
Item (57), Line 1: "de la Santa" should read --de la Sante--.

Column 3,

Line 59, "19,20-epoxy-1 g-methyl-1-eicosyl" should read
--19,20-epoxy-19-methyl-1-eicosyl--.

Column 7,

Line 33,



Column 24,

Line 36, "culture x-axis in Fig. 1)." should read --culture (x-axis in Fig. 1).--.

MAILING ADDRESS OF SENDER:

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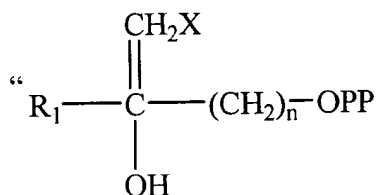
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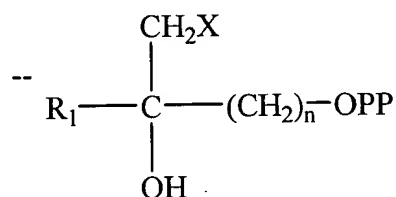
Column 7,

Line 33,



(10)"

should read



(10)--.

Column 24,

Line 36, "culture x-axis in Fig. 1)." should read --culture (x-axis in Fig. 1).--.

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